

## REMARKS

Claims 1-68 were filed in the original application. Claims 11-31, 41, 43-55 and 64-68 are withdrawn, due a restriction requirement. Claims 1-8, 10, 32-40, 42 and 56-63 stand rejected. Applicants thank the Examiner for indicating that claim 9 would be allowable after appropriate amendment. By the present amendment, without prejudice, claims 1-4, 6-8, 10, 40, 42 and 56-63 are canceled, claims 5, 9, 32 and 34 are amended, and claims 69 and 70 are added.

Upon entry of this Amendment, claims 5, 9, 32-39, 69 and 70 will be pending and are presented for reconsideration. Applicants submit that no new matter is introduced by the amendments and new claims, and that claims 5, 9, 32-39, 69 and 70 are in condition for allowance.

### Amendments to the Claims

Claim 9, now independent, is amended to include all of the limitations of its base claim, i.e., claim 1, now canceled, and all intervening claims. Dependent claims 5, 32 and 34 have been amended to depend from amended independent claim 9. Due to the amendments to claims 32 and 34, claims 33 and 35-39 now depend indirectly from amended independent claim 9.

### New Claims 69 and 70

New claims 69 and 70 are introduced to more particularly point out and distinctly claim two embodiments of interest. New claim 69 recites a liquid-chromatography system that includes, in part, a control means for issuing, to fluid movement means, fluid movement command signals for increasing a fluid rate in response to a second signal and decreasing the rate in response a first signal to cause the fluid movement means to draw the fluid at an optimum rate that prevents vaporization of the fluid. New claim 70 recites a method of liquid chromatography that includes drawing a fluid at a rate in a fluid path, sensing a phase state of the moving fluid, and optimizing the rate, in response to the sensed state of the fluid, to prevent vaporization of the moving fluid.

These claims are supported throughout the application as filed. See, for example, original claims 9 and 32, and the Specification at page 18/lines 7-8, page 24/lines 17-18, and page 25/lines 24-26.

Objection to 9

Claim 9 is objected to as being allowable but dependent on a rejected base claim. In view of the amendments to claim 9, Applicants respectfully request reconsideration and withdrawal of the objection to claim 9, as amended.

Rejection of Claims 1-4, 6-8, 10, 32 33, 40, 42, 62 and 63 Under 35 U.S.C. § 102(b)

Claims 1-4, 6-8, 10, 32, 33, 40, 42, 62 and 63 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,242,586 to Ransohoff ("Ransohoff"). Claims 1-4, 6-8, 10, 40, 42, 62 and 63 are canceled by the present amendment.

Dependent claims 32 and 33, due to the present amendment, now depend from allowable amended independent claim 9. Therefore, Ransohoff does not disclose all of the features of either claim 32 or claim 33, as amended, which each now include, in part, a device that includes a sensor and a control means that issues a fluid movement command signal for increasing a rate of a fluid while receiving a second signal and a fluid movement command signal for decreasing the rate while receiving a first signal, to move the fluid at an optimum rate that prevents vaporization of the fluid.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of the rejection, under 35 U.S.C. § 102(b), of dependent claims 32 and 33, as amended.

Rejection of Claim 5 Under 35 U.S.C. § 103(a)

Dependent claim 5 is rejected under 35 U.S.C. § 103(a) over Ransohoff in view of U.S. Patent No. 4,939,943 to Strohmeier. Claim 5, by the present amendment, now depends from allowable amended independent claim 9. The combination of Ransohoff and Strohmeier do not disclose all of the features recited by claim 5, as amended, which include, in part, a device that includes a sensor and a control means that issues a fluid

movement command signal for increasing a rate of a fluid while receiving a second signal and a fluid movement command signal for decreasing the rate while receiving a first signal, to move the fluid at an optimum rate that prevents vaporization of the fluid.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of the rejection, under 35 U.S.C. § 103(a), of dependent claim 5, as amended.

*Rejection of Claims 34-39 and 56-61 Under 35 U.S.C. § 103(a)*

Dependent claims 34-39 and 56-61 are rejected under 35 U.S.C. § 103(a) over Ransohoff in view of Japanese Laid Open Patent Application JP 07005157 to Sogawa et al. ("Sogawa"). Claims 56-61 are canceled by the present amendment.

Claim 34-39, by the present amendment of claim 34, now all depend directly or indirectly from allowable amended independent claim 9. The combination of Ransohoff and Sogawa do not disclose all of the features recited by any one of claims 34-39, as amended, which include, in part, a device that includes a sensor and a control means that issues a fluid movement command signal for increasing a rate of a fluid while receiving a second signal and a fluid movement command signal for decreasing the rate while receiving a first signal, to move the fluid at an optimum rate that prevents vaporization of the fluid.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of the rejection, under 35 U.S.C. § 103(a), of dependent claims 34-39, as amended.

*New Claims 69 and 70*

New claim 69 recites a liquid-chromatography system that includes: a sensor for monitoring for vaporization of a fluid moving in a pathway of the system, and for outputting first and second signals respectively associated with gaseous and liquid phases of the moving fluid; a fluid movement means for drawing the fluid through the pathway at a rate; and a control means for issuing, to the fluid movement means, at

least one fluid movement command signal for increasing the rate in response to receipt of the second signal and at least one fluid movement command signal for decreasing the rate in response to receipt of the first signal to cause the fluid movement means to draw the fluid at an optimum rate that prevents vaporization of the fluid.

New claim 70 recites a method of liquid chromatography that includes: drawing a fluid at a rate in a fluid path of a liquid-chromatography system; sensing a phase state of the moving fluid; and optimizing the rate, in response to the sensed state of the fluid, to prevent vaporization of the moving fluid.

Applicants respectfully submit that claim 69 and claim 70 are each patentable over the cited references because the cited references, each alone or in combination, do not disclose all of the features noted above.

Conclusion

In view of the amendments and arguments presented herein, Applicants respectfully request that the objection to claim 9 and the rejection of claims 5 and 32-39 be reconsidered and withdrawn, with claims 5, 9, 32-39, 69 and 70 proceeding to allowance. The Examiner is invited to call the undersigned, if the Examiner believes that a telephone conversation could be helpful in expediting prosecution of the instant application.

Respectfully submitted,

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